International application No. PCT/KR2005/000681

### A. CLASSIFICATION OF SUBJECT MATTER

# IPC7 H04Q 7/22

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC7 H04Q 7/22

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean Patents and applications for inventions since 1975

Korean Utility models and applications for Utility models since 1975

Electronic data base consulted during the intertnational search (name of data base and, where practicable, search terms used) eKIPASS

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KR2003-0056138 A (SK TELECOM CO.,LTD.) 04.JUL.2003 see the whole document.	1-32
A	KR1998-0061819 A (DAEWOO TELECOM LTD.) 07.OCT.1998 see the whole document.	1-32
A	US5978679 A (QUALCOMM INC.) 02.NOV.1999 see the whole document.	1-32

Further documents are listed in the continuation of Box C.

See patent family annex.

- \* Special categories of cited documents:
- "A" document defining the general state of the art which is not considered to be of particular relevance
- 'E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- O" document referring to an oral disclosure, use, exhibition or other
- "P" document published prior to the international filing date but later than the priority date claimed
- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

07 JULY 2005 (07.07.2005)

Date of mailing of the international search report

08 JULY 2005 (08.07.2005)

Name and mailing address of the ISA/KR



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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/KR2005/000681

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
KR2003-0056138 A	04.JUL.2003	NONE	
KR1998-0061819 A	07.0CT,1998	NONE	
US5978679 A	02.NOV.1999	AT276632E AU1706197A1 AU19971706182 AU723264B2 BR9708429A CA2247190AA CN1152594C CN1214844A DE69730698C0 EP882378A1 EP882378B1 F1981778A F1981778A F1981778A0 HK1017558A1 ID15872A !L125877A0 !L125877A1 JP12505261 JP2000505261T2 JP3515125B2 KR1019990087151 KR1020037010045 N0983879A0 RU2193290C2 W09731503A1 ZA9701478A	15.10.2004 10.09.1997 10.09.1997 24.08.2000 03.08.1999 28.08.1997 02.06.2004 21.04.1999 21.10.2004 09.12.1998 15.09.2004 23.10.1998 18.08.1998 22.04.2005 14.08.1997 11.04.1999 31.10.2003 25.04.2000 05.04.2000 05.04.2004 15.12.1999 30.07.2003 21.08.1998 20.11.2002 28.08.1997 28.08.1997